



6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R03-OAR-2018-0277; FRL-9988-14-Region 3]

Approval and Promulgation of Air Quality Implementation Plans; Pennsylvania; Removal of Department of Environmental Protection Gasoline Volatility Requirements for the Pittsburgh-Beaver Valley Area

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is taking final action approving a state implementation plan (SIP) revision submitted by the Commonwealth of Pennsylvania. The Pennsylvania Department of Environmental Protection (PADEP) submitted a SIP revision on May 2, 2018 seeking the removal from the Pennsylvania SIP of the requirement limiting summertime gasoline volatility to 7.8 pounds per square inch (psi) Reid Vapor Pressure (RVP) to address nonattainment under the 1-hour ozone national ambient air quality standard (NAAQS) in the Pittsburgh-Beaver Valley ozone nonattainment area (hereafter Pittsburgh-Beaver Valley Area). The submitted SIP revision includes a demonstration, pursuant to Clean Air Act (CAA), that amendment of the approved SIP will not interfere with the area's ability to attain or maintain any NAAQS. EPA is approving this revision to remove the PADEP requirement for use of 7.8 psi RVP gasoline in summer months from the Pennsylvania SIP, in accordance with the requirements of the Clean Air Act (CAA).

DATES: This final rule is effective on [insert date 30 days after date of publication in the Federal Register].

ADDRESSES: EPA has established a docket for this action under Docket ID Number EPA-R03-OAR-2018-0277. All documents in the docket are listed on the <https://www.regulations.gov> website. Although listed in the index, some information is not publicly available, e.g., confidential business information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available through <https://www.regulations.gov>, or please contact the person identified in the “For Further Information Contact” section for additional availability information.

FOR FURTHER INFORMATION CONTACT: Brian Rehn, (215) 814-2176, or by e-mail at rehn.brian@epa.gov.

SUPPLEMENTARY INFORMATION:

I. Background

On June 15, 2018 (83 FR 27901 and 82 FR 27937), EPA simultaneously published a notice of proposed rulemaking (NPRM) and a direct final rule (DFR) for the Commonwealth of Pennsylvania approving its revision to remove the PADEP’s 7.8 psi summertime RVP requirement from the Pennsylvania SIP. In the NPRM, EPA proposed to approve Pennsylvania’s request to remove the 7.8 psi RVP summertime gasoline requirement from the Pennsylvania SIP. However, EPA received adverse comments on the rulemaking and withdrew the DFR on August 6, 2018 (83 FR 38261) prior to its effective date of August 14, 2018. In this final rulemaking, EPA is responding to the comments submitted on the proposed revision to the Pennsylvania SIP and is approving Pennsylvania’s demonstration that removal of the program does not interfere with the Pittsburgh-Beaver Valley Area’s ability to attain or maintain any

NAAQS under section 110(l) of the CAA. The formal SIP revision requesting this removal of the PADEP summertime low RVP program for the Pittsburgh-Beaver Valley Area was submitted by Pennsylvania on May 2, 2018.

II. Summary of Pennsylvania's SIP Revision

A. Pennsylvania's Gasoline Volatility Requirements for the Pittsburgh-Beaver Valley Area

On November 6, 1991, EPA designated and classified the Pittsburgh-Beaver Valley Area as moderate nonattainment for the 1979 1-hour ozone NAAQS. As part of Pennsylvania's efforts to bring the Pittsburgh-Beaver Valley Area into attainment of the ozone standard, the Commonwealth adopted and implemented a range of ozone precursor emissions control measures for the area -- including adoption of a state rule to limit summertime gasoline volatility to 7.8 psi RVP. Pennsylvania's RVP control rule applied to the entire Pittsburgh-Beaver Valley Area -- Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland Counties. PADEP promulgated this rule in the November 1, 1997 *Pennsylvania Bulletin* (27 Pa.B. 5601, effective November 1, 1997), which is codified in Subchapter C of Chapter 126 of the Pennsylvania Code of Regulations (25 Pa. Code Chapter 126, Subchapter C). On April 17, 1998, Pennsylvania submitted its state-adopted rule to EPA as a formal revision to its SIP and EPA subsequently approved Pennsylvania's low RVP SIP requirements in a June 8, 1998 **Federal Register** (63 FR 31116) and codified in the *Code of Federal Regulations* at 40 CFR 52.2020(c)(1).¹

¹The Allegheny County Health Department (ACHD) later adopted a similar summertime gasoline low RVP rule (Allegheny County Order No. 16782, Article XXI, sections 2102.40, 2105.90, and 2107.15; effective May 15, 1998, amended August 12, 1999). On March 23, 2000, PADEP formally submitted a SIP revision to EPA (on behalf of ACHD) to incorporate ACHD's own gasoline RVP summertime requirements into the Pennsylvania SIP. EPA approved that SIP revision establishing an independent ACHD gasoline RVP limit on April 17, 2001 (66 FR 19724), effective June 18, 2001. This action does not address ACHD requirements that are in the SIP.

B. Pennsylvania's Revision of its Low RVP Gasoline Requirements

In the 2013-14 session, the Pennsylvania General Assembly passed and Governor Corbett signed into law Act 50 (P.L. 674, No. 50 of May 14, 2014). Act 50 amended the Pennsylvania Air Pollution Control Act, directing PADEP to initiate a process to obtain approval from EPA of a SIP revision that demonstrates continued compliance with the NAAQS, through utilization of substitute, commensurate emissions reductions to balance repeal of the Pittsburgh-Beaver Valley Area RVP limit. Upon approval of that demonstration, Act 50 directs PADEP to repeal the summertime gasoline RVP limit provisions of 25 Pa. Code Chapter 126, Subchapter C.

On May 2, 2018, PADEP submitted a SIP revision requesting that EPA remove from the Pennsylvania SIP Chapter 126, Subchapter C of the Pennsylvania Code (specifically requesting removal of 25 Pa. Code sections 126.301, 126.302, and 126.303), based upon a demonstration that the repeal of the RVP requirements rule (coupled with other ozone precursor emission reduction measures) would not interfere with the Pittsburgh-Beaver Valley Area's attainment of any NAAQS, per the requirements for noninterference set forth in section 110(l) of the CAA. Section 110(l) prohibits EPA from approving a SIP revision if the revision "would interfere with any applicable requirement concerning attainment and reasonable further progress... or any other applicable requirement of [the Act.]" Pennsylvania's SIP revision contains a noninterference demonstration, pursuant to CAA section 110(l). This demonstration is comprised of an analysis that the emissions impact from repeal of the 7.8 psi gasoline volatility requirement in Pittsburgh (to be replaced by the Federal 9.0 psi summertime gasoline requirement)² have been offset by

²Upon the effective date of EPA approval of this SIP revision, the 1.0 psi waiver for 10% ethanol blends will be allowed in the Pittsburgh area (with the exception of Allegheny County, which currently has a separate RVP summertime limit). If in the future EPA should approve a SIP revision removing the ACHD's RVP rule from the approved SIP, the 1.0 psi waiver for ethanol blends would no longer apply there as well.

means of substitution of commensurate emissions reductions from other measures enacted by Pennsylvania that were not previously credited in any SIP towards attainment or maintenance of any NAAQS. Pennsylvania's May 2, 2018 SIP revision references EPA's updated photochemical grid modeling results for the 2008 ozone NAAQS, which forecasts that the Pittsburgh-Beaver Valley Area will continue to attain the 2008 ozone NAAQS and maintain attainment of the 2015 ozone NAAQS by 2023. Additionally, the Commonwealth's SIP contains emission inventory projections prepared by the Mid-Atlantic Regional Air Management Administration (MARAMA) showing declining emissions of ozone and particulate matter (PM) precursor emissions in 2018 and 2023.

The May 2, 2018 SIP revision references the Commonwealth's regulatory amendment to Chapter 126, Subchapter C, as published in the April 7, 2018 *Pennsylvania Bulletin* (48 Pa. B. 1932, effective upon publication), which serves to repeal the PADEP requirement for 7.8 psi RVP summer gasoline by amending 25 Pa. Code Section 126.301 (relating to gasoline volatility requirements) to remove the RVP requirement for the Pittsburgh-Beaver Valley Area RVP upon the effective date of EPA's approval of Pennsylvania's May 2, 2018 SIP revision. As a result, both state and Federal repeal of the requirements for summertime RVP in the area will coincide with the effective date of EPA's final action to approve the Commonwealth's related SIP submittals.

III. EPA's Analysis of Pennsylvania's SIP Revision

A. Pennsylvania's Estimate of the Impacts of Removing the 7.8 psi RVP Requirement

As the Commonwealth's adoption of a 7.8 psi summertime limit for gasoline RVP in Pittsburgh is not a mandatory requirement of the CAA, EPA's primary consideration for determining the approvability of Pennsylvania's request to rescind the requirements for a gasoline volatility

control program is whether this requested action complies with section 110 of the CAA, specifically section 110(l), governing removal of an EPA-SIP requirement.³ Section 110(l) of the CAA requires that a revision to the SIP not interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in section 171), or any other applicable requirement of the CAA. EPA evaluates each section 110(l) noninterference demonstration on a case-by-case basis considering the circumstances of each SIP revision. EPA interprets CAA section 110(l) as applying to all NAAQS that are in effect, including those that have been promulgated, but for which EPA has not yet made designations. In evaluating whether a given SIP revision would interfere with attainment or maintenance, as required by CAA section 110(l), the EPA generally considers whether the SIP revision will allow for an increase in actual emissions into the air over what is allowed under the existing EPA-approved SIP. States do not necessarily need to produce a new complete attainment demonstration for each revision to the SIP, provided that the status quo air quality is preserved. In the absence of an attainment demonstration or maintenance plan that demonstrates removal of an emissions control measure will not interfere with any applicable NAAQS or requirement of the CAA under section 110(l), states may substitute equivalent emissions reductions to compensate for any change to a SIP-approved program. “Equivalent” emission reductions mean reductions which are equal to or greater than those reductions achieved by the control measure approved in the SIP. To show that compensating emission reductions are equivalent, modeling or other adequate justification must be provided. The compensating, equivalent reductions should represent real emissions reductions achieved in a contemporaneous time frame to the change of the existing

³CAA section 193, with respect to removal of requirements in place prior to enactment of the 1990 CAA Amendments, is not relevant because Pennsylvania’s RVP control requirements in the Pittsburgh-Beaver Valley Area were not included in the SIP prior to enactment of the 1990 CAA amendments.

SIP control measure, in order to preserve the status quo level of emissions in the air. In addition to being contemporaneous, the equivalent emissions reductions should also be permanent, enforceable, quantifiable, and surplus to be approved into the SIP.

Pennsylvania's May 2, 2018 SIP revision contains a section 110(l) demonstration that uses equivalent emission reductions to offset "losses" from emission reductions resulting from the removal of the SIP approved 7.8 psi RVP summertime gasoline requirement in the Pittsburgh-Beaver Valley Area of Pennsylvania. Specifically, PADEP demonstrates the emission reductions associated with the 7.8 psi RVP fuel requirement will be substituted with equivalent or greater emissions reductions from: 1) an adopted, implemented Pennsylvania regulation relating to the use and application of adhesives, sealants, primers, and solvents at 25 Pa. Code Section 129.77; and 2) permanent shutdown of a facility in the Pittsburgh-Beaver Valley Area. These substitute emissions are quantifiable, permanent, surplus, enforceable, and contemporaneous (i.e. occurring at approximately the same period of this demonstration and/or the anticipated cessation of the low RVP fuel program). With removal of the state 7.8 psi summertime RVP requirement, the Federal 9.0 psi RVP limit remains as the applicable requirement.

To determine the emissions impact of removing the 7.8 psi RVP program requirements in the Pittsburgh-Beaver Valley Area, PADEP considered first the pollutants that impact any NAAQS that are controlled through lowering of gasoline RVP: Volatile organic compounds (VOC), nitrogen oxides (NO_x), and direct emissions of fine particulate matter smaller than 2.5 microns in diameter (PM_{2.5}). PADEP's analysis focuses on VOC and NO_x emissions because low RVP requirements were adopted by the Commonwealth to address the ozone NAAQS and because VOCs and NO_x emissions are the primary precursors for ground-level ozone formation. NO_x,

VOC, and direct PM_{2.5} emissions also contribute to formation of PM_{2.5} and therefore PADEP also analyzed the effect on the PM_{2.5} NAAQS. PADEP limited its analysis of emissions increases from removal of the RVP requirements to affected portions of the total emissions inventory for the Pittsburgh-Beaver Valley Area such as the highway vehicle emissions sector, nonroad vehicle emissions sector, and gasoline storage and distribution emissions sources within the stationary point source sector. EPA finds the Commonwealth's analysis of the affected universe of emissions sources reasonable, as the 7.8 psi RVP gasoline requirement impacts only emission sources that store, distribute, or combust gasoline. PADEP studied the impacts of low RVP program removal on the emissions inventory at several points in time representing a period prior to removal of the low RVP program (i.e., 2014), the year of cessation of the PADEP 7.8 psi low RVP program (i.e., 2018), and a point five years in the future after program cessation (i.e., 2023).

To generate these estimates, PADEP used the latest version of EPA's Motor Vehicle Emissions Simulator (MOVES), version MOVES2014a, to characterize motor vehicle emissions. EPA notes that PADEP's analysis showed that increasing gasoline RVP in the Pittsburgh area in and of itself no longer results in an increase in emissions of VOCs in the highway vehicle sector, as increases in VOCs from evaporative loss and permeation through porous materials are offset by improved exhaust emissions reductions from improvements in new motor vehicles (e.g., improved engine control, air/fuel management, timing management, etc.). Thus, as newer vehicles replace older ones in the fleet, the VOC benefits from low RVP gasoline for the highway vehicle sector of the area's total emission inventory are reduced. PADEP modelled nonroad emissions using the MOVES model, version 2014a, which incorporates EPA's NONROAD 2008 model, coupled with the 2014 NEI version 1 emission inventory, to compile a

base year scenario. PADEP assumed this portion of the inventory would see an increase of three percent of total VOC emissions from removal of the Commonwealth's 7.8 psi RVP gasoline program.

Changes in gasoline RVP produce emissions from not only vehicles and equipment that store and combust the fuel, but also from evaporation and permeation from movement, storage, and transportation of the fuel as part of the gasoline distribution system. These sources include gasoline refineries and terminals, pipelines, gasoline tanker trucks, storage tanks, service station tanks, and portable gas cans comprising a mix of large, point emissions sources and much smaller area emissions sources. Emissions from larger sources (e.g., refineries and bulk gasoline terminals) can be estimated through direct measurement or calculated from energy input, and are listed as discrete sources in the periodic point source emission inventory, while smaller, areas sources can be estimated via look-up emission factors (e.g., from EPA's AP-42 compendium of emission factors) and use of activity information (or surrogates for activity like population) or gasoline sales numbers. Table 1 summarizes combined highway mobile, nonroad, and point and area source emissions impacts from the removal of the Commonwealth's 7.8 psi low RVP program, for the 2018 and 2023 scenarios evaluated for this SIP revision.

Table 1. Summary of Combined Emission Impacts from Removal of the 7.8 psi Program in the Pittsburgh-Beaver Valley Area in 2018 and 2023 [reductions (-) and increases (+), in tons per year (tpy) and tons per day (tpd)]

2018	VOC		NO _x		PM _{2.5}
	tpy	tpd	tpy	tpd	tpy
Highway	-41.4	-0.18	+43.5	+0.3	-2.0
Nonroad	+153	+1	0	0	0
Point/Area	+7	-0.02	0	0	0

Total Change in 2018 Emissions	+119	+0.84	+43.5	+0.3	-2.0
2023	tpy	tpd	tpy	tpd	tpy
Highway	-46.5	-0.24	+13.1	+0.09	-2.2
Nonroad	+155	+1.01	0	0	0
Point/Area	+7	+0.02	0	0	0
Total Change in 2023 Emissions	+116	+0.79	+13.1	+0.09	-2.2

Based on our review of the information provided, EPA finds that PADEP used reasonable methods and the appropriate tools (e.g., emissions estimation models, emissions factors, and other methodologies) in estimating the effect on emissions from removing the 7.8 psi RVP summertime gasoline program for purposes demonstrating noninterference with any NAAQS under CAA 110(l). PADEP determined that in 2018 the emissions increase resulting from removal of the 7.8 psi RVP requirement (and replacement with the Federal 9.0 RVP gasoline program) would be 0.84 summertime tpd of VOC and 0.3 summertime tpd of NO_x in the Pittsburgh-Beaver Valley Area. PADEP's demonstration shows that direct emissions of PM_{2.5} decrease by 2.0 tpy from removal of the 7.8 psi RVP requirement (and replacement with the Federal 9.0 RVP gasoline program). By 2023, the emissions impact of removal of the 7.8 psi RVP requirement would slightly increase emissions from 2018, to 0.79 tpd of VOCs and 0.09 tpd of NO_x, with direct PM_{2.5} emissions decreasing slightly more than 2018 estimates.

B. Pennsylvania's Substitution of Alternative Emissions Reduction Measures for the 7.8 psi Low RVP Gasoline Program

PADEP estimated lost and compensating emission reductions for the year of removal of the Commonwealth's low RVP gasoline program (after considering the benefits from replacement

with the Federal 9.0 RVP gasoline program). PADEP also estimated emissions impacts in the year 2023 to examine the future impacts of removal of the 7.8 psi state summertime RVP requirement. To compensate for the emissions impact of repeal of this requirement in the Pittsburgh-Beaver Valley Area, PADEP analyzed the emission benefits associated with two substitute measures previously implemented but not “claimed” in any prior SIP attainment plan (under CAA section 172) for the Commonwealth. These measures are: 1) Overcontrol of VOC emissions from Pennsylvania’s adhesives rule (25 Pa. Code § 129.77); and 2) Unclaimed creditable emissions reductions associated with the permanent closure in 2015 of a glass manufacturing facility in Allegheny County, Guardian Industries Jefferson Hills facility.

A detailed description of these offsetting measures and the calculations prepared by PADEP are provided in EPA’s DFR for this action, which was published in the June 15, 2018 **Federal Register** (83 FR 27901), which was subsequently withdrawn by EPA in the August 6, 2018 **Federal Register** (83 FR 38261). However, EPA’s description of the Commonwealth’s submittal and its overview of the CAA 110(l) noninterference demonstration are unchanged here from that presented by EPA in the June 15, 2018 DFR, and as such will not be restated here.

C. Comparison of Emissions Impacts from Removal of the Commonwealth’s 7.8 psi RVP Gasoline Program and the Uncredited Emission Reductions from Substitute Measures

Pennsylvania relies upon NO_x, VOC, and PM_{2.5} emission reductions from its adoption of the Ozone Transport Commission (OTC) model adhesives rule and from the shutdown of Guardian Industries Jefferson Hills glass manufacturing facility in Allegheny County to offset the emissions impact of removing the Commonwealth’s summertime gasoline volatility control rule and to support its argument that removal of 7.8 psi RVP requirement from the SIP will not interfere with attainment of any NAAQS. To be conservative in its approach, Pennsylvania

elected to adjust upward by 25 percent its estimates for the emission impact of the removal of the 7.8 psi RVP gasoline program to account for uncertainty in its calculation of the estimates for the emissions benefits from that program (see Table 2). Table 2 summarizes the Pittsburgh-Beaver Valley Area emissions increases from repeal of the low RVP gasoline program compared to the emissions benefits resulting from the alternative emission reduction measures.

Table 2. Summary of Pittsburgh-Beaver Valley Impacts from Removal of the 7.8 psi Gasoline Volatility Program Compared to Emissions Benefits from Alternative Measures (in 2018 and 2023)

2018	VOC		NOx		PM _{2.5}
	tpy	tpd	tpy	tpd	tpy
Change in Emissions from RVP Rule Repeal ⁴	119	0.84	43.5	0.3	-2.0
Emission Adjustment to RVP Change Estimate (25% increase)	30	0.21	11	0.08	-2.0
Total Emissions Requiring Offset	149	1.05	54.5	0.38	--
Adhesives Rule Reductions for Offset	1,163	3.2	0	0	0
Facility Shutdown Reductions for Offset	13.8	0.04	625	1.8	26.5
Total Available Offset Emissions	1,177	3.24	625	1.8	28.5
Remaining Reductions After Offsetting Removal of State RVP Program [i.e., Total Emissions Requiring Offset – Total Available Offsets]	1,028	2.19	570.5	1.0	28.5

⁴This increase (or decrease) in emissions is the net emission change when comparing the Commonwealth's 7.8 psi requirement for the Pittsburgh-Beaver Valley Area to the Federal 9.0 psi RVP program requirement that will remain upon removal of the Commonwealth's program.

2023	VOC		NO _x		PM _{2.5}
	tpy	tpd	tpy	tpy	tpy
Change in Emissions from RVP Rule Repeal ⁵	116	0.79	13.1	0.09	-2.0
Emission Adjustment to RVP Change Estimate (25% increase)	29	0.20	3.3	0.02	--
Total Emissions Requiring Offset	144	0.99	16.4	0.11	-2.0
Adhesives & Sealants Rule Reductions	1,159	3.19	0	0	0
Guardian Industries Facility Shutdown Reductions	13.8	0.04	625	1.8	26.5
Total Available Offset Emissions	1,173	3.23	625	1.8	28.5
Surplus Reductions After Offset [Total Emissions Requiring Offset – Total Available Offsets]	1,028	2.24	608.6	1.69	28.5

As indicated in Table 2, Pennsylvania has more VOC, NO_x, and PM_{2.5} emission reductions from its alternative emission reduction measures than are necessary to offset fully the loss in emissions reductions resulting from repeal of the Commonwealth's low RVP gasoline program -- in both 2018 (the year of repeal of the low RVP gasoline program) and in the 2023 future case.

Reductions from the Guardian Industries facility shutdown in Allegheny County far exceed what is needed to offset NO_x from the removal of the low RVP requirement in the Pittsburgh-Beaver Valley Area. The Guardian facility owner did not request that potential creditable emissions reductions be preserved in the emission inventory, as required by 25 Pa. Code Chapter 127, Subchapter E (relating to new source review (NSR)) within one year of closure, thus forfeiting

⁵This increase (or decrease) in emissions is the net emission change when comparing the Commonwealth's 7.8 psi requirement for the Pittsburgh-Beaver Valley Area to the Federal 9.0 psi RVP program requirement that will remain upon removal of the Commonwealth's program.

the ability to apply for transferable emission reduction credits (ERC) under Pennsylvania's NSR rules. However, PADEP reserved the right to potentially request consideration of these remaining reductions as part of a future SIP demonstration relating to NAAQS planning requirements. However, such future usage would be the subject of a future SIP revision developed by PADEP at a later time. Any remaining reductions from the offsetting measures listed here in support of the May 2, 2018 SIP revision are not being included in any inventory or memorialized for future use as part of this action. EPA believes they cannot be used by a new or modified facility as offsets for compliance to meet the NSR program in this nonattainment area. The reductions from the offsetting shutdown and adhesives and solvent rule have not been previously claimed for emissions reduction credit for any prior SIP-approved plan. These offsetting measures will help ensure that removal of the low RVP gasoline program will not interfere with any NAAQS for the Pittsburgh-Beaver Valley Area.

EPA believes that the removal of the 7.8 psi low RVP fuel program requirements in the Pittsburgh-Beaver Valley Area does not interfere with Pennsylvania's ability to demonstrate compliance with any of the ozone or PM_{2.5} NAAQS, which could potentially have been impacted by the NAAQS pollutant precursors that are the subject of the SIP revision. EPA's analyses of the Commonwealth's SIP revision for CAA 110(l) impact is supported by its use of substitute emission reduction measures that ensure permanent, enforceable, contemporaneous, surplus emissions reductions are achieved within the Pittsburgh-Beaver Valley Area which far exceed the slight increase in NO_x and VOC pollutants from the removal of low RVP fuel especially as Pennsylvania is still subject to the Federal RVP fuel requirement of 9.0 psi. Based on Pennsylvania's CAA 110(l) analysis showing surplus emission reductions, EPA has no reason to believe that the removal of the low RVP fuel requirements in the Pittsburgh-Beaver Valley Area

will negatively impact the area's ability to attain or maintain any NAAQS including specifically ozone and PM_{2.5} or interfere with reasonable further progress. In addition, EPA believes that removing the 7.8 psi low RVP program requirements in the Pittsburgh-Beaver Valley Area will not interfere with any other CAA requirement as the Area will remain subject to the Federal low RVP fuel requirements. Other specific requirements of EPA's action to approve the Commonwealth's CAA 110(l) noninterference demonstration and the rationale for EPA's action are explained in the EPA's DFR for this action published in the June 15, 2018 **Federal Register** (83 FR 27901), which was subsequently withdrawn by EPA in the August 6, 2018 **Federal Register** (83 FR 38261). These rationale and requirements from the June 2018 DFR will not be restated here.

IV. Response to Comments Received During the EPA Public Comment Period on the NPRM

EPA received comments from five separate commenters. Of these, comments from three anonymous commenters were not relevant to our proposed action, and as such, EPA will not address those non-relevant comments here. Based on the receipt of adverse public comments relevant to this action, EPA acted on August 6, 2018 to withdraw our June 15, 2018 DFR, based on the terms set forth in that action. EPA's response to comments received is as follows below:

Comment 1: Commenter contends that EPA can't rely on the undated "clarification letter" sent from Krishnan Ramamurthy, Director, Bureau of Air Quality, PADEP to Ms. Cristina Fernandez, Air Protection Division (3AP00) U.S. Environmental Protection Agency, Region III, as Mr. Ramamurthy is not authorized to formally submit SIPs to EPA, as only the state Governor or their designee can submit SIPs for approval. Further, the commenter states that Ms.

Fernandez is also not able to receive SIP submissions, as EPA regulations require submission to be sent to the Regional Administrator.

Response 1: The clarification letter submitted electronically to EPA on May 23, 2018 (and received in hard copy by EPA on May 25, 2018) by Mr. Ramamurthy to Ms. Fernandez does not constitute a formal SIP revision or SIP transmittal letter. Pennsylvania formally submitted the SIP that is the subject of this rulemaking action on May 2, 2018, via a letter from Secretary Patrick McDonnell of PADEP to EPA Regional Administrator Cosmo Servidio. Secretary McDonnell is the duly delegated representative of Governor Wolf for submission of a Pennsylvania SIP revision and Regional Administrator Servidio is the delegated recipient at EPA for receiving SIP revisions. The May 23, 2018 clarification letter merely reiterates and clarifies what was already stated in the May 2, 2018 SIP submittal letter. The May 2, 2018 submittal letter makes clear PADEP's request that EPA remove 25 Pa. Code Chapter 126, Subchapter C (relating to gasoline volatility requirements) as a Federally enforceable control measure from the Commonwealth's SIP and that EPA not approve the final form state rulemaking amending Chapter 126, Subchapter C (as published in the April 7, 2018 *Pennsylvania Bulletin* (Vol. 48, No. 14)). Mr. Ramamurthy's May 23, 2018 letter is not a formal SIP revision and did not need to follow EPA regulations for SIP submittals to be from a governor or governor's delegate. EPA posted the letter to the docket as a formal communication from the State after the formal SIP submittal and referenced it in our June 15, 2018 DFR action as such.

Comment 2: The commenter states that EPA can't approve Pennsylvania's SIP revision because PADEP has not submitted evidence that the rule has been repealed and that EPA regulations require SIP revisions to include a copy of the actual regulation submitted for approval, indicating the changes made to the prior version. The commenter argues that the SIP

must include a copy of the official state regulation (signed, stamped, and dated by the appropriate state officials indicating it is state enforceable), with the effective date indicated in the regulation itself (or with a separate letter signed, stamped, and dated by the appropriate State official indicating the effective date). The commenter argues that PADEP's May 2, 2018 SIP submittal letter and May 23, 2018 clarification letter can be interpreted one of two ways, with the result being either: 1) that the May 2nd SIP submission lacks evidence that the amended Chapter 126, Subchapter C rule has been adopted by PADEP in final form; or 2) that the Commonwealth has submitted evidence of a final rule which revises rather than removes Subchapter C. Under the latter interpretation, the commenter argues that instead of removing the State rule, the amended rule adds subsection (d) to §126.301 of the rule. The commenter contends that under either of these interpretations of the Commonwealth's intent of the SIP submittal or the subsequent clarification letter, EPA can't remove Chapter 126, Subchapter C from the SIP. The commenter contends that removal of a SIP-approved rule must contain evidence that the rule has been repealed by the state, citing prior EPA rulemaking examples where that was the case. These examples include: Wisconsin Stage II gasoline vapor recovery removal (EPA-R05-OAR-2017-0279); several examples of removal and addition of Reasonably Available Control Technology (RACT) determinations for Maryland (EPA-R03-OAR-2016-0309) and North Carolina (EPA-R04-OAR-2009-0140); and replacement of the clean air interstate rule (CAIR) with the cross-state air pollution rule (CSAPR) in Virginia (EPA-R03-OAR-2017-0215) and West Virginia (EPA-R03-OAR-2016-0574). The commenter argues that EPA should require evidence of state-effective regulatory repeal, prior to formal removal of a rule from the SIP, following past practice to avoid acting capriciously.

Response 2: EPA disagrees with the commenter. Removal of a state regulation from the Federally approved SIP does not require evidence that the state has repealed the regulation from state law. CAA section 110 addresses SIP revisions and 40 CFR part 51 addresses SIP submittal requirements, but no provisions in the CAA or regulations require a state to repeal a regulation before requesting removal of a regulation from the SIP. PADEP indicated in its May 2, 2018 SIP submittal letter that it sought removal of Subchapter C from the SIP upon EPA approval of its demonstration of noninterference as required by CAA section 110(l) for SIP revisions. PADEP provided a 110(l) demonstration which EPA finds meets requirements of the CAA. None of the cited examples preclude EPA from removing Subchapter C from the SIP at the State's request prior to the State's repeal of Subchapter C from state law.

Comment 3: A commenter contends that the Commonwealth's revision to its 25 Pa. Code Chapter 126, Subchapter C (which added a new paragraph (d) to §126.301) can't be approved into the SIP as there is no enforceable effective date for repealing Subchapter C and the revised rule plainly states that Subchapter C will no longer be in effect upon EPA's removal of the Subchapter from the SIP. The commenter argues this is circular logic on the state's part if EPA can only approve the rule into the SIP when they are adopted and state-effective, but the State's rule only becomes effective once EPA removes the affected Subchapter C from the SIP. The commenter argues that the only options for EPA rulemaking are to approve the Commonwealth's non-interference demonstration or to add to the SIP the state-approved subsection (d) of §126.301. The commenter believes that EPA is limited to action on the submitted non-interference demonstration, as the Commonwealth's May 2 SIP submittal letter directs EPA not to approve the newly amended rule as an addition to the Pennsylvania SIP.

Response 3: EPA disagrees with the commenter. First, the Commonwealth in the May 2, 2018 SIP submission has not sought to include the revised version of Subchapter C (with newly added subsection (d)) to the Pennsylvania SIP. Second, EPA's decision in this rulemaking action is to approve the Commonwealth's noninterference demonstration and to simultaneously remove the low RVP regulatory requirements from the SIP. Thus, the commenter's concerns regarding the effective date of the revised version of Subchapter C are irrelevant, as the amended Chapter 126 is not in the SIP, nor has Pennsylvania sought to include it into the SIP.

Comment 4: Commenter argues that EPA can't remove Subchapter C from the SIP because Pennsylvania failed to follow the process set forth in state law related to removal of the state low RVP program (hereafter referred to as Act 50). The commenter contends that EPA can't approve this SIP because PADEP does not have the legal authority to request removal of Subchapter C from the SIP until EPA approves the Commonwealth's noninterference demonstration. The commenter indicates that Act 50 prohibits the PADEP from promulgating regulations to repeal Subchapter C until EPA approves a revision which demonstrates noninterference with the NAAQS. The commenter argues that since EPA has not yet approved a noninterference demonstration, PADEP has neither the authority to repeal 25 Pa. Code Chapter 126, Subchapter C, nor to request its removal from the SIP.

Response 4: EPA disagrees that PADEP has not acted in accordance with Pennsylvania's Act 50. On May 2, 2018, Pennsylvania submitted to EPA a request to remove Subchapter C from the SIP and a demonstration of noninterference with the NAAQS from removal of low RVP requirements from the SIP through use of emission reductions from alternate measures. In this rulemaking, EPA is approving the noninterference demonstration and removing the low RVP requirements from the SIP. Thus, PADEP has acted in accordance with Act 50 and may

subsequently remove requirements from state law. PADEP addressed the issue of the order of events prescribed by Act 50 (with respect to timing of its submission to and approval by EPA of a noninterference demonstration SIP versus that of the state repeal of the low RVP requirements) in its state rulemaking. *See* April 2, 2018 Pennsylvania Bulletin, Vol. 48 No. 14 (responding to comments from Pennsylvania's independent regulatory review commission (IRRC) on the issue of the sequence of the events required by Act 50). EPA believes the Commonwealth addressed concerns with Act 50 during Pennsylvania's state regulatory adoption process. Pennsylvania has general authority to both enact and remove emission control measures and to request their inclusion as part of the Federal SIP or removal from the SIP. The provisions of Act 50 have not curtailed PADEP's authority and EPA believes PADEP acted in accordance with Act 50 by the May 2, 2018 SIP submission prior to removing the low RVP requirements from state law.

Comment 5: The commenter argues that EPA cannot fully approve this SIP revision because both EPA and PADEP failed to consider nonattainment of the 1971 Sulfur Dioxide (SO₂) NAAQS in Armstrong County as part of the noninterference demonstration required by section 110(l) of the CAA. Madison, Mahoning, Boggs, Washington, and Pine Townships in Armstrong County are still classified as nonattainment at 40 CFR part 81, so the 1971 standard remains in effect. Since PADEP never submitted an attainment plan for this area, the commenter argues it is not possible to determine whether the removal of the PADEP 7.8 psi gasoline RVP program will adversely impact the area and that EPA can therefore only partially approve the noninterference demonstration (as EPA's guidance requires a noninterference demonstration to consider the effect on all NAAQS in effect).

Response 5: The commenter is correct that portions of Armstrong County were designated by EPA as nonattainment for the 1971 SO₂ NAAQS, which was promulgated by EPA in April 1971

(36 FR 8186, April 30, 1971), and were never subsequently redesignated by EPA to attainment. EPA promulgated a revised NAAQS for SO₂ in June 2010 (75 FR 35520, June 22, 2010). EPA later designated portions of Allegheny and Beaver Counties as nonattainment under the 2010 SO₂ NAAQS in October 2013 (78 FR 47191, August 5, 2013). On October 3, 2017, PADEP submitted attainment demonstration plans to EPA for both the Allegheny and Beaver County areas for approval. These submitted plans purport to demonstrate attainment of the 2010 SO₂ NAAQS in 2018 based on air dispersion modelling. EPA has not yet taken final action to approve these plans. However, as PADEP indicated in its May 2, 2018 noninterference demonstration SIP, emissions of SO₂ from fuel combustion are directly related to the sulfur content of the fuel itself, with sulfur from the fuel bound to oxygen as a byproduct of combustion. Gasoline sulfur content is regulated by EPA via separate, Federal rules. Regulation of motor gasoline volatility has no direct impact on sulfur emissions, therefore Pennsylvania concluded that removal of PADEP's 7.8 low RVP requirements will not interfere with any portion of the affected Pittsburgh-Beaver Valley Area's ability to attain or maintain any SO₂ NAAQS. EPA concurs with Pennsylvania's conclusion as discussed in this rulemaking. Likewise, EPA expects no interference with Armstrong County's ability to attain the SO₂ NAAQS because regulation of motor gasoline volatility does not impact SO₂ tailpipe or evaporative emissions. The low RVP program was instead designed to reduce evaporative and combustion emissions of VOCs to reduce formation of ozone. Removal of the state RVP limit does not affect sulfur compound emissions or the secondary formation of SO₂ from motor vehicles or nonroad engines and equipment.

Comment 6: The commenter contends that although EPA designated the Pittsburgh-Beaver Valley Area attainment for 2015 ozone standard, recent air quality data from ACHD shows

exceedances of the 2015 ozone standard this year and even potential violations of the NAAQS should current data be certified. PADEP's noninterference demonstration refers to EPA photochemical air quality modeling for 2023 as proof the area will remain in attainment of the ozone NAAQS, but EPA's modeling does not account for the sharp jump in exceedances from this summer, and the modeling is based on a scenario with low RVP gasoline in place. The commenter believes that recent air quality exceedances negate the PADEP noninterference demonstration premise that with no expected growth of NO_x and VOC emissions, there will be no future interference with attainment of the 2008 or 2015 ozone NAAQS. The commenter believes that additional emission reductions from this (and other) measures may be needed for future ozone NAAQS compliance.

Response 6: While several ozone monitors in the Pittsburgh-Beaver Valley Area have registered exceedances in the summer of 2018, this data is not considered valid until it has been determined to be complete, quality assured and quality controlled. On December 6, 2016 (81 FR 87819), EPA determined that the Pittsburgh-Beaver Valley Area attained the 2008 8-hour ozone NAAQS by its July 20, 2016 attainment date, based on complete, certified, and quality assured ambient air quality monitoring data for the 2013–2015 monitoring period. Although the 2016 action did not constitute redesignation to attainment, it demonstrated that monitored air quality for the area met the 2008 ozone NAAQS. Further, on November 16, 2017 (82 FR 54232), EPA designated all counties in the Pittsburgh-Beaver Valley Area as attainment of the more stringent 0.070 parts per million (ppm) 2015 ozone NAAQS. This information forms the basis for the Commonwealth's statements that the Pittsburgh-Beaver Valley Area is currently attaining all ozone NAAQS, and more recent, preliminary data for the area does not negate this decision. While it is possible the area will violate at some future date, the currently available data does not

support EPA disapproving the Commonwealth's removal of the low RVP program based on the data available at present.

With respect to the Commonwealth's reliance on future case photochemical grid modeling prepared for MARAMA's use in assessing regional ozone modeling and for EPA use for interstate ozone transport modeling, the modelling referred to by the commenter does not include increased emissions from removal of the state low RVP program, but the small increases from removal of the state program are far outweighed by the much larger actual and future expected reductions in stationary point source and overall highway mobile emission reductions. For the MARAMA modeling, future 2023 VOC onroad emissions⁶ are projected to decrease from 2014 levels⁷ by 60 percent (over 8,550 tpy) -- far outweighing any benefits from the state low RVP gasoline program (even without accounting for offsetting benefits from the substitution measures listed in the noninterference demonstration). During the same period, onroad NOx emissions are expected to drop from 28,142 tpy to 8,147 tpy, due primarily to new Federal vehicle and fuel standards. Stationary point source NOx emission reductions are even more dramatic in the same period, dropping from 54,711 tpy in 2014 to 33,813 tpy in 2023, primarily from shutdown and fuel switching of large electric generating units (EGUs). With respect to impact on the associated photochemical air modeling, these sector reductions far outweigh any reductions that would be provided from the retention of the PADEP low RVP measure. EPA agrees with the Commonwealth's contention in their noninterference demonstration that the photochemical grid modeling (i.e., the results of the MARAMA regional modeling and EPA's interstate ozone transport modeling) constitutes additional supporting evidence that, with respect to future

⁶ Based on MARAMA's 2023 gamma inventory, referenced in Table 9 of Pennsylvania's May 2, 2018 SIP revision.

⁷ Based on EPA's 2014 National Emission Inventory (NEI) version 1 final, referenced in Table 9 of Pennsylvania's May 2, 2018 SIP revision.

attainment and maintenance of the ozone NAAQS, the potential emissions benefit of retaining the PADEP low RVP program is greatly outweighed by other emissions reduction strategies that continue to impact this area.

Comment 7: The commenter contends that EPA should require PADEP to submit a SIP revision to account for the permanent shutdown of the Guardian Industries Jefferson Hills glass manufacturing facility in Allegheny County. The commenter states that PADEP stated its intent to retain the balance of the creditable emissions reductions from this source not being used as part of the noninterference demonstration (i.e., any remaining available offsets after substitution for low RVP program, including a 25 percent emissions adjustment) for potential future use by PADEP or ACHD for future SIP planning purposes. The commenter requests that EPA require PADEP to submit ERCs for approval into the SIP to keep track of the remaining balance for future SIP purposes, as has been required for shutdown sources in the past. The commenter cites several past examples where ERCs have been memorialized in the SIP for this purpose, which added USX Corp/US Steel Group-Fairless Hills and Rockwell Heavy Vehicle Inc.-New Castle Forge Plant permanent shutdowns to the SIP (*See* 61 FR 15709 and 64 FR 18818).

Response 7: EPA disagrees with parts of the commenter's premise regarding what Pennsylvania has requested with respect to the shutdown of this Guardian Industries facility. PADEP indicates in its noninterference demonstration that Guardian Industries permanently ceased operation in August 2015 and that Guardian Industries did not request that potentially creditable reductions be preserved in the emission inventory within one year of closure, as required by Pennsylvania's rules governing NSR at 25 Pa. Code §127.207(2) for receipt of ERCs. As a result, PADEP states that Guardian Industries is ineligible to apply for ERCs.

Although PADEP characterizes the shutdown emissions reductions as permanent, surplus, enforceable, and quantifiable, PADEP does not characterize them as ERCs – the generation and registration of which is governed by specific application criteria under Pa. Code Chapter 127, Subchapter E. Because the permanent emission reductions from the shutdown are not an ERC, as defined at Chapter 127, Subchapter E, EPA believes that Chapter 127 of the PA Code thus does not require inclusion of these reductions in either a state plan approval or in the Pennsylvania SIP. Thus, EPA disagrees with the commenter’s contention that PADEP should be required to submit a SIP revision to account for the permanent shutdown of the Guardian Industries Jefferson Hills glass manufacturing facility in Allegheny County. The facility’s permits for Guardian Industries are no longer valid and the facility cannot be reactivated without undergoing NSR and being re-permitted. EPA believes that the Guardian Industries shutdown is permanent, enforceable, surplus, and verifiable based on the information provided by PADEP in the SIP submittal to remove low RVP from the SIP and that the source is no longer eligible to apply for ERCs given the governing regulations for ERCs. Because a SIP submittal is not required for PADEP to use the permanent emissions reductions from Guardian in its noninterference demonstration, EPA also disagrees with the commenter regarding the ability to use any remaining reductions from Guardian not relied upon in the noninterference demonstration for use in future SIP planning purposes.

Comment 8: The commenter cites EPA’s statement in section IV.B.2 of its June 15, 2018 DFR that, “PADEP asserts the reductions have not been used and cannot be used in the future by Pennsylvania to meet any other obligation, including attainment demonstration, facility emission limitation, reasonable further progress, or maintenance plan requirements for the area.” The commenter disagrees with EPA, believing that PADEP states in its submission that they wish to

retain the balance of the creditable emission reductions from the Guardian Industries shutdown emissions for use by PADEP or ACHD to offset future emission increases in the Pittsburgh-Beaver Valley Area. The commenter requests that EPA clarify this inconsistency between PADEP statements in its SIP submission and EPA 's statement in the June 15, 2018 DFR.

Response 8: The commenter is correct that PADEP states in the May 2, 2018 noninterference demonstration SIP its desire to retain the balance of the creditable emission reductions not used in the demonstration (including a 25 percent PADEP allowance to the projected RVP removal emissions increase). PADEP estimates that the remaining available creditable emission reductions will total 1028 tpy (2.19 tpd) of VOCs, 571 tpy (or 1.0 tpd) of NO_x, and 28.5 tpy of PM_{2.5} in 2018. By 2023, PADEP projects the remaining available emission credits will total 1028 tpy (or 2.24 tpd) of NO_x, 609 tpy (or 1.69 tpd) of VOC, and 28.5 tpy of PM_{2.5}. EPA inadvertently incorrectly stated in our DFR that we believed Pennsylvania could not use any remaining available creditable emission reductions for any other future purpose. EPA intended to state that Pennsylvania could not use the emission reductions from the Guardian closure, which it relies upon for the noninterference demonstration, in any future planning activities under the CAA. EPA did not intend to address the remaining available creditable emissions reductions and any future uses PADEP may have for those remaining reductions. EPA's intention in the June 15, 2018 DFR was to state that the shutdown reductions from Guardian Industries cannot be used as ERCs to offset future stationary source growth, as the facility did not apply for the creation of ERCs prior to the deadline in 25 Pa. Code Chapter 127. Use of any remaining surplus creditable emissions by the Commonwealth is not relevant to today's action, and in any case the use of the reductions would be part of a future SIP revision, which would require a separate determination of non-interference under section 110(l) that would be evaluated

on its merits at that time. Any remaining emission reduction credit would need to be determined at that time to be surplus, enforceable, quantifiable, and contemporaneous (if being used in substitution for another measure) and shown to not be included in a base cases emissions inventory previously approved as part of the SIP.

Comment 9: PADEP's onroad analyses failed to perform winter weekday runs to determine winter time PM levels and whether reductions would be needed. PM typically increases during winter time as stated in EPA's MOVES guidance and so summer time PM or annual PM runs may not be representative of actual PM occurring during winter months. This is especially important since the PM NAAQS is a 24-hour standard and not an annual standard so only relying on annual or summer runs will not be representative of the worst-case scenario.

Response 9: The MOVES emissions modeling performed for this SIP revision was performed for purposes of demonstrating that PADEP's removal of the low RVP program would not interfere with any applicable requirement concerning attainment and reasonable further progress (RFP), or any other applicable requirement of the CAA. This noninterference requirement prohibits EPA from approving a SIP revision that revises a SIP without a demonstration that such removal or modification will not interfere with attainment of the NAAQS, reasonable further progress, or any other applicable requirement of the CAA. Pennsylvania's 110(l) noninterference demonstration focuses on showing that any emissions increases from removal of the PADEP low RVP summertime control program (for any pollutant that would affect any NAAQS applicable to the Pittsburgh area) are fully offset by other substitute emission control measures. Because the low RVP program being removed is a control measure only in effect from May through September, it is unnecessary to perform MOVES modeling of the program in winter months. While the PADEP low RVP program is a VOC control measure, originally

adopted to reduce VOC emissions as ozone precursors, the program does slightly impact summertime NO_x and PM_{2.5} emissions. Pennsylvania's noninterference demonstration does analyze these summertime impacts on those emissions that affect both the ozone and PM_{2.5} NAAQS. PM_{2.5} emissions are typically inventoried and analyzed on an annualized tonnage (expressed as tons per year) for purposes of SIP planning. However, there is no impact from removal of the summertime PADEP low RVP program requirements on wintertime emissions because EPA does not regulate gasoline RVP outside of the June 1st through September 15th period. During the remaining portion of the year, gasoline RVP is governed by standards established by the American Society for Testing and Materials for the purposes of ensuring drivability during colder weather. Generally, gasoline RVP is higher during the colder portion of the year.

Comment 10: The commenter requests that EPA explain how it reviewed the onroad and nonroad MOVES runs as it appears that PADEP did not include any input files used to compile the onroad and nonroad inventories or much information at all to be able to perform an independent analysis. EPA must be an independent reviewer of the state's demonstration -- it can't simply approve anything and everything the state submits. The commenter argues that since the input and output files were not available in the public docket, the public was not able to verify whether PADEP's modeling was performed correctly, and therefore EPA should ask PADEP to supplement the docket to include these materials and EPA should reopen the comment period to provide the public time to review the supplementary information.

Response 10: PADEP prepared its emissions analysis for its noninterference demonstration using a methodology similar to that used in preparing highway emission inventories to satisfy the requirements of section 172(c)(3) of the CAA. For highway mobile source emissions, this

entailed utilization of a regional mobile source highway emission inventory for the Pittsburgh-Beaver Valley Area. PADEP's contractor, Michael Baker, prepared a projection inventory of summer weekday and annual conditions for 2018 and 2023 analysis years. The Commonwealth's May 2, 2018 SIP revision contains a summary of the methodology used to generate highway mobile emissions estimates using MOVES2014a. Appendix D to the May 2, 2018 SIP includes attachments detailing the highway mobile analysis methodology, MOVES input assumptions and input parameters, and MOVES sample input files. The Commonwealth utilizes custom MOVES post-processing software to calculate hourly vehicle speeds and to prepare batch traffic input files to the MOVES model. This analysis methodology is consistent with past statewide inventory efforts, including state input to the 2014 NEI. While this inventory level analysis makes review of the MOVES input information more difficult, the Commonwealth has attempted to clearly document the input information used, the results generated, and to provide MOVES input file samples that underlie the analysis. This is not a new means of inventory level mobile source analysis for Pennsylvania, as Pennsylvania uses this method for all highway emissions inventory plans submitted to EPA. EPA therefore disagrees with the commenter that the analysis is unverifiable, or that the Commonwealth should be required to supplement its documentation for the docket for this action. EPA does not agree that the comment period should be reopened to allow for additional time to review Pennsylvania's analysis as sufficient information supporting PADEP's demonstration supporting the SIP revision was available for review.

Comment 11: PADEP assumes a three percent increase in emissions for stationary area and point sources but never explains where this three percent originated. PADEP says the assumption comes from the similar increase seen in nonroad emissions but there's no reason to

believe nonroad emissions would increase at the same rate as area or point sources. Nonroad vehicles are not the same as area or point sources, nonroad vehicles typically emit VOCs from combustion exhaust, leaking gas caps, or permeation through gas tanks but area and point sources emit VOCs from leaking tanks, expansion valves in tanks, bad connections, or spillage from transferring gas. EPA has never allowed cross-category (i.e. nonroad to area/point categories) emission factors to estimate expected emissions from sources, this has never been done before in emissions inventories. EPA should require PADEP to better explain the three percent assumption to ensure their assumptions are valid and reasonable.

Response 11: EPA agrees that PADEP has not presented supporting information to validate its assumption that affected point area sources would see the same increase in emissions as would affected nonroad mobile sources from removal of the state RVP rule, as VOC emissions from area point sources of gasoline transport and storage are mostly evaporative in nature and not necessarily consistent with those from nonroad mobile sources VOC emissions (which have tailpipe, evaporative permeation, and engine hot soak and evaporative emissions). However, it would have proven difficult for PADEP to specifically estimate emissions impact from the affected point area sources, as EPA no longer updates the TANKS emissions estimation model⁸ and instead refers to the original AP-42 equations for use in determining emission factors for storage tanks. Use of AP-42 factors to determine the change in emissions on these sources from removal of the PADEP low RVP gasoline rule would require extensive tank and product specific information from each source that PADEP would need to calculate and project. EPA believes

⁸TANKS is a Windows-based, EPA-created computer software program used to estimate VOC and hazardous air pollutant (HAP) emissions from fixed- and floating-roof storage tanks. TANKS is based on the emission estimation procedures from Chapter 7 of EPA's Compilation Of Air Pollutant Emission Factors (AP-42). The TANKS model was developed using software that is now outdated, and therefore, the model is not reliably functional on computers using certain operating systems such as Windows Vista or Windows 7. EPA no longer supports TANKS and instead recommends use of AP-42 emission factors for this purpose.

the change in emission factors would be small and that any error caused by use of this assumption would not dramatically impact the emissions impact on this sector from removal of the PADEP 7.8 RVP rule.

The VOC emissions from area point sources affected by removal of the PADEP low RVP requirement total 217 tpy in the 2014 NEI. Assuming three percent growth in emissions from removal of the rule results an increase of only seven tpy of VOCs (or 0.02 tpd). Because emissions from this sector are so small, even doubling PADEP's estimate would only lead to a negligible increase in 2018 or 2023 VOC emissions from this sector. EPA therefore finds that PADEP's assumption of a three percent growth in VOC emissions in the area point sector resulting from removal of the state RVP rule, while simplistic for emission inventory purposes, is reasonable for this CAA 110(l) analysis and even if it results in understatement of the increase in emissions from removal of the low RVP rule, as it is more than overcome by PADEP's conservative approach to the analysis, as PADEP buffers the overall results on all sectors by increasing by 25 percent the overall impact on all sectors for both NO_x and VOC emissions to account for uncertainty in their analysis. PADEP's simplistic three percent growth assumption for emissions from point area sources would translate to a very small overall emissions change for the sector and is reasonable for purposes of this CAA 110(l) analysis.

Comment 12: A commenter contends that EPA should disapprove PADEP's SIP submission because 25 Pa. Code 129.77 is not a "surplus" emission reduction, as Reasonably Available Control Technology (RACT) is required under section 184 of the CAA for the State to meet RACT requirements for states in the Northeast Ozone Transport Region (OTR), as this category of emissions is covered by an EPA-issued Control Techniques Guideline (CTG). As a result, the commenter argues that reductions from RACT can't be considered "surplus" because the

reductions achieved are necessary to satisfy mandatory requirements separate from attainment or maintenance plans, since states in an OTR are required to enact RACT on a statewide basis.

Response 12: In evaluating whether a given SIP revision would interfere with attainment or maintenance, as required by CAA section 110(l), EPA generally considers whether the SIP revision will allow for an increase in actual emission into the air over what is allowed under the existing EPA-approved SIP. EPA has not required that a state produce a new complete attainment demonstration for every SIP revision, provided the status quo air quality is preserved. *See Kentucky Resources Council, Inc. v. EPA*, 467 F.3d 986 (6th Cir. 2006). EPA elaborated on compliance options for complying with the CAA noninterference clause in our “Guidance on Removing Stage II Gasoline Vapor Control Programs from State Implementation Plans and Assessing Comparable Measures” (EPA-457/B-12-001, dated August 7, 2012). In that guidance, EPA indicated that 110(l) noninterference could be demonstrated if an increase in emissions from removal of a measure would be offset by excess emission reductions not accounted for in the current SIP. Per this guidance, a state has wide latitude in selecting additional controls, including substitution of NO_x controls, as long as the offsetting emission controls are contemporaneous with a rule being phased-out. The guidance indicates that the offsetting measures can come from substitution of additional emission controls not already in the SIP, or alternatively through offset of emissions due to excess emission reductions not accounted for in the current SIP (e.g., changes to an area’s stationary or area source emission inventory resulting from changes in industrial population or activity, or from shutdown of a source.) EPA believes that Pennsylvania’s use of the term “surplus” in reference to the RACT “overcontrol” from the adhesives source category is, for CAA 110(l) purposes, a reference to the fact that the PADEP adhesives rule adopts the OTC model rule that exceeds EPA requirements for CTG RACT in this

category and also that the benefits of the rule have not been previously claimed in a prior EPA-approved control strategy SIP (e.g., a reasonable further progress plan, maintenance plan, or attainment demonstration, etc.). Therefore, the adhesives and sealant rule generates emission reductions that could serve to offset the increases from removal of the low RVP requirement, in a contemporaneous timeframe to that removal. Given that the Pittsburgh-Beaver Valley Area has no requirements to demonstrate RFP of any ozone NAAQS, the focus of CAA 110(l) demonstration in this case is to show that removal of the provision will maintain the status quo of air quality in the area and thereby not interfere with attainment of any ozone NAAQS. While part of Pennsylvania's adhesives and sealants rule addresses the requirements of the adhesives CTG to demonstrate compliance with RACT, (and is a mandatory component of the SIP), part of Pennsylvania's adhesives and sealants rule addresses emissions and activities not covered by the CTG, and are surplus to the requirement of the adhesives CTG. Also, since the Pittsburgh-Beaver Valley Area has no outstanding Reasonable Available Control Measure (RACM) requirement because they have no attainment plan requirement under CAA 172(c) and 182(b), the pertinent applicable requirement under CAA 110(l) is demonstrating that this action will not interfere with maintenance of ozone or any other NAAQS. EPA finds Pennsylvania has done that through its analysis.

Further, EPA disagrees with the commenter that reductions from a RACT measure (required for an OTR state) cannot be used to show noninterference under CAA 110(l). Nothing in CAA 110(l) prevents consideration of required RACT or CTG measures from being considered as offsetting reductions for noninterference purposes. Thus, the fact that the adhesives and sealant rule, relied upon by PADEP to assist in showing removal of low RVP requirements will not interfere with the NAAQS, is part of a RACT measure is not relevant to the inquiry. EPA

discussed how removal of the low RVP requirement will not interfere with the NAAQS, RFP or any other CAA requirement in the DFR and herein relying upon Federal fuel requirements to minimize emission increases as well as reductions in pollutants from Guardian's closure and the adhesives and sealants rule. The status of the adhesives rule as a RACT requirement does not alter EPA's conclusion of non-interference with the ozone or any other NAAQS from the removal of the fuel requirement from the Pennsylvania SIP.

Comment 13: The commenter states as part of the noninterference demonstration required by CAA 110(l), EPA must consider the ozone forming potential of VOC reductions being used to offset the increased VOC stemming from the removal of the state gasoline RVP limit through photochemical grid modeling that considers temperature increased due to climate change.

Response 13: EPA reviews 110(l) on a case-by-case basis through individual SIP actions. EPA issued guidance in 2012 addressing removal of Stage II vapor recovery requirements from SIPs, which contains guidance that is relevant here.⁹ Specifically, the EPA Stage II removal guidance discusses compliance with 110(l) as possible even with slight emission increases, in cases where those increases do not interfere with attainment, or are very small foregone, near-term emissions reductions that are expected to diminish rapidly over time that are assumed too small (or temporary in nature) to interfere with attainment or RFP towards attainment of a NAAQS. The guidance suggests this may be particularly evident in areas that are already attaining the NAAQS, or where emissions and/or air quality projections demonstrate the area is likely to maintain the NAAQS in the future. Although the Stage II program removal guidance recommends use of photochemical grid modeling as a means to demonstrate noninterference, it

⁹Guidance on Removing Stage II Gasoline Vapor Control Programs from State Implementation Plans and Assessing Comparable Measures, August 2012.

indicates that non-interference can be demonstrated through other means for purposes of CAA 110(l).¹⁰ Pennsylvania's section 110(l) demonstration for RVP removal takes the approach that minor increases in emissions from removal of the PADEP low RVP program will be offset by other contemporaneous measures, that future modeling continues to show emissions of pollutants contributing to ozone will drop dramatically in the near term, and that EPA's preliminary ozone transport photochemical grid modeling for the 2015 ozone NAAQS shows future attainment.

Given the scale of emission reductions underlying that modeling as discussed in PADEP's SIP submittal, the relatively tiny emission increases from removal of the low RVP program are not expected to influence continued attainment of the NAAQS in the Pittsburgh-Beaver Valley Area in the near term. Nothing in CAA 110(l) requires an attainment demonstration or airshed modeling showing that the measure being removed would impact the NAAQS at any level to make a satisfactory showing of noninterference under CAA section 110(l). Pennsylvania refers to the modeling that shows future attainment of the ozone NAAQS as part of its noninterference demonstration to support removal of the 7.8 RVP program from the SIP. The commenter has not explained why photochemical grid modeling is necessary for section 110(l) purposes or why EPA must consider temperature increases attributed to climate change for these purposes. The commenter points to no specific statutory requirement regarding climate change with which this SIP revision to remove RVP requirements would interfere or which would affect our conclusion regarding PADEP's section 110(l) analysis. Further, the commenter provided no information to counter the modeling from MARAMA or from EPA which is referenced in the Commonwealth's submitted SIP revision. Thus, no further response is provided to this comment.

¹⁰Guidance on Removing Stage II Gasoline Vapor Control Programs from State Implementation Plans and Assessing Comparable Measures, August 2012, section 2.2.

Comment 14: The commenter states that EPA must consider the consequences of increased gasoline consumption from removal of the PADEP low RVP requirement.

Response 14: The commenter did not indicate what linkage exists between gasoline consumption and gasoline RVP limit. PADEP did not analyze the impacts of additional gasoline usage directly related to any expected lower cost of gasoline attributed with removal of the state RVP summertime limit. While PADEP examined price impact from RVP limits using historical retail gasoline prices during its rulemaking process, the commenter did not provide sufficient information to justify that any such relationship exists between consumption and gasoline RVP limits.

Further, PADEP did consider impacts of RVP pricing on consumption in the state rulemaking process. PADEP's own historic price analysis indicates that retail prices for low RVP fuel in the Pittsburgh-Beaver Valley Area were 9 cents per gallon more on average than statewide average retail gasoline price during the 2014 state low RVP control season (May-Sept), ranging from 1.6 to 9.2 cents per gallon over statewide gasoline prices during the 2011-2015 5-year period.

PADEP's regulatory calculations assumed that removal of the State RVP summertime requirement would save an average Pittsburgh driver between \$1.60 to \$9.20 per summer season, if they purchased 100 gallons of gasoline during the period of retail purchase applicability.

PADEP's modeling analysis of the highway vehicle emissions impact from removal of the low RVP program used MOVES emissions modeling emission factors and an apportionment of statewide vehicle miles of travel (based on Pittsburgh's apportionment of statewide gasoline usage). However, PADEP's emissions modeling did not rely upon direct assumption of gasoline usage, as the MOVES model estimates emissions using a variety of inputs (e.g., traffic volume,

vehicle speeds, vehicle fleet composition, fuel characteristics, and other local emission control programs, etc.) However, gasoline consumption was not a direct input into the computer model. EPA believes that due to the low expected per gallon gasoline cost savings attributed to removal of the PADEP low RVP program, the short duration of the program (i.e., 4 months of the year), and the relatively indirect nature of gasoline consumption on the modeled highway emission reductions, it is unlikely that vehicle miles traveled (VMT) will rise dramatically from removal of the program or that any slight rise in gasoline usage for part of the year would dramatically increase emissions compared to a scenario where the PADEP low RVP program is not removed. Therefore, EPA believes it unnecessary for PADEP to reflect a projection scenario in its emissions modeling for its noninterference demonstration where gasoline usage is increased beyond normal gasoline growth assumptions and thus PADEP's emissions analysis remains reasonable without such consideration. Furthermore, to account for uncertainty in their emissions impact estimates, PADEP added a 25% upwards adjustment to their estimate of total substitute emission reductions necessary to offset the loss in emissions reductions from removal of the state low RVP program. EPA believes this additional level of overcontrol more than makes up for the impact of potential additional fuel sales in the Pittsburgh-Beaver Valley area due to potential fuel price differences and fuel sales resulting from removal of the state summertime low RVP program.

V. Impacts on the Boutique Fuels List.

Section 1541(b) of the Energy Policy Act of 2005 required EPA, in consultation with the U.S. Department of Energy, to determine the number of fuels programs approved into all SIPs as of September 1, 2004 and to publish a list of such fuels. On December 28, 2006 (71 FR 78192),

EPA published the list of boutique fuels. EPA maintains the current list of boutique fuels on its web site at: <https://www.epa.gov/gasoline-standards/state-fuels>. The final list of boutique fuels was based on a fuel type approach. CAA section 211(c)(4)(C)(v)(III) requires that EPA remove a fuel from the published list if it is either identical to a Federal fuel or is removed from the SIP in which it is approved. Under the adopted fuel type approach, EPA interpreted this requirement to mean that a fuel would have to be removed from all states' SIPs in which it was approved in order to remove the fuel type from the list. (71 FR 78195). The 7.8 psi RVP fuel program (as required by Pa. Code Chapter 126, Subchapter C), as approved into Pennsylvania's SIP, is a fuel type that is included in EPA's boutique fuel list (71 FR 78198-99; <https://www.epa.gov/gasoline-standards/state-fuels>). The specific counties in the Pittsburgh-Beaver Valley Area where summer low RVP gasoline is required are identified on EPA's Gasoline Reid Vapor Pressure web page (<https://www.epa.gov/gasoline-standards/gasoline-reid-vapor-pressure>). Subsequent to the final effective date of EPA's approval of Pennsylvania's May 2, 2018 SIP revision to remove Pennsylvania's Chapter 126, Subchapter C 7.8 psi RVP requirement from the SIP, EPA will update the State Fuels and Gasoline Reid Vapor Pressure web pages with the effective date of the SIP removal. However, the entry for Pennsylvania will not be completely deleted from the list of boutique fuels, as Allegheny County remains subject to a separate, SIP-approved 7.8 psi RVP gasoline requirement of ACHD's Rules and Regulations, Article XXI, pending future action by ACHD to repeal that rule and submit a formal SIP revision requesting its repeal from the Pennsylvania SIP. This deletion of Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland Counties from the list will not result in an opening on the boutique fuels list because the 7.8 psi RVP fuel type remains for one Pennsylvania County, and in other state SIPs.

VI. Final Action

EPA is approving Pennsylvania's May 2, 2018 SIP demonstration that removal of PADEP's low RVP summertime gasoline program does not interfere with the Commonwealth's ability to attain or maintain any NAAQS in the Pittsburgh-Beaver Valley Area, in compliance with the requirements of CAA section 110(l). With this action, EPA is also granting Pennsylvania's request to remove PADEP's low RVP summertime gasoline requirements at 25 Pa. Code Chapter 126, Subchapter C from the Pennsylvania SIP. Our approval of the May 2, 2018 SIP submittal is in accordance with CAA requirements in section 110, including section 110(l) specifically.

EPA's approval of the May 2, 2018 Pennsylvania SIP revision does not remove the separate SIP requirement applicable requiring use of 7.8 psi RVP gasoline during summertime months in Allegheny County, under requirements set forth in Article XXI, Rules and Regulations of the ACHD, which were approved by EPA as part of the Commonwealth's SIP on April 17, 2001 (66 FR 19724). PADEP will submit a SIP revision, at a later date, on behalf of ACHD to remove or otherwise amend the separate Allegheny County low RVP gasoline program rule. Neither ACHD's rule nor the related approved Pennsylvania SIP for Article XXI are the subject of this action or the Pennsylvania May 2, 2018 low RVP gasoline SIP revision.

VII. Statutory and Executive Order Reviews

A. General Requirements

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting

Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a “significant regulatory action” subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because SIP approvals are exempted under Executive Order 12866.
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and

- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the state, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

B. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

C. Petitions for Judicial Review

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by **[Insert date 60 days after date of publication in the Federal Register]**. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of

judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action to approve Pennsylvania's request for removal of summertime low RVP gasoline requirements from the SIP may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Incorporation by reference, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

Dated: December 10, 2018.

Cosmo Servidio,
Regional Administrator,
Region III.

40 CFR part 52 is amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

Subpart NN—Pennsylvania

§ 52.2020 [Amended]

2. In § 52.2020, the table in paragraph (c)(1) is amended by removing the heading and entries for “Subchapter C – Gasoline Volatility Requirements” under Title 25, Chapter 126 Standard for Motor Fuels.

[FR Doc. 2018-27481 Filed: 12/19/2018 8:45 am; Publication Date: 12/20/2018]